

WHAT IS CLAIMED IS:

1. A scanning apparatus for scanning radiographic media comprising:
 - a) a housing;
 - b) a scanning stage mounted within the housing;
 - c) a scanning head mounted on the scanning stage, wherein the scanning stage is adapted for translational movement along an axis;
 - d) an opening in the housing for receiving a cassette;
 - i) radiographic media having a latent image disposed in the cassette, wherein the radiographic media has a ferromagnetic end, and wherein the cassette consists of a closed box shape having an upper door and a lower door;
 - ii) a first magnet secured to the upper door;
 - iii) a second magnet secured to the lower door, wherein the polarity of the first magnet is in the same orientation as the polarity of the second magnet;
 - iv) a magnetic latch mounted within the scanning apparatus to hold the radiographic media at the ferromagnetic end, wherein the magnetic latch is mounted so that the polarity of the magnetic latch repels the polarity of the first and second magnets;
 - e) an analog to digital converter in communication with the scanning head;
 - f) a control processing unit in communication with the analog to digital converter; and
 - g) an output device in communication with the control processing unit.
2. The scanning apparatus of claim 1 wherein the radiographic media is a plate, a screen, a sheet, or combinations thereof.

3. The scanning apparatus of claim 1 wherein the radiographic media is a phosphorous plate.

4. The scanning apparatus of claim 1 wherein the cassette consists of a non-ferrous metal.

5. The scanning apparatus of claim 1 wherein the cassette consists of a resilient plastic.

6. The scanning apparatus of claim 1 wherein the magnetic latch is a rare earth magnet.

7. The scanning apparatus of claim 1 wherein the magnetic latch is an electromagnet.

8. The scanning apparatus of claim 1 wherein the scanning head comprises a light source for stimulating an area of the radiographic media to emit light, a light collector to collect the emitted light, and a light detector to convert the collected light to a signal.

9. A scanning apparatus for scanning radiographic media comprising:

- a) a housing for the scanning apparatus;
- b) a scanning stage mounted within the housing;
- c) a scanning head mounted on the scanning stage, wherein the scanning stage is adapted for translational movement along an axis;
- d) an opening in the housing for receiving a cassette;
 - i) radiographic media having a latent image disposed in the cassette, wherein the radiographic media has a ferromagnetic end, and wherein the cassette consists of a closed box having an upper door and a lower door;

- ii) a magnetic latch mounted within the scanning apparatus to hold the radiographic media at the ferromagnetic end;
- e) an analog to digital converter in communication with the scanning head;
- f) a control processing unit in communication with the analog to digital converter; and
- g) an output device in communication with the control processing unit.

10. The scanning apparatus of claim 9 wherein the doors open and close using a non-magnetic mechanical device.

11. The scanning apparatus of claim 10 wherein the non-magnetic mechanical device is a pin.

12. The scanning apparatus of claim 9 wherein the radiographic media is a plate, a screen, or combinations thereof.

13. The scanning apparatus of claim 9 wherein the radiographic media is a phosphorous plate.

14. The scanning apparatus of claim 9 wherein the cassette consists of a non-ferrous metal.

15. The scanning apparatus of claim 9 wherein the cassette consists of a resilient plastic.

16. The scanning apparatus of claim 9 wherein the magnetic latch is a rare earth magnet.

17. The scanning apparatus of claim 9 wherein the magnetic latch is an electromagnet.

18. The scanning apparatus of claim 9 wherein the scanning head comprises a light source for stimulating an area of the radiographic media to emit light, a light collector to collect the emitted light, and a light detector to convert the collected light to a signal.

19. A method for scanning radiographic media wherein the media comprises at least one ferromagnetic end, the method comprising the steps of:

a) inserting a cassette into a scanning apparatus, wherein the cassette further comprises first and second doors, wherein the first door has a first magnet and the second door has a second magnet and the polarity of the first magnet is in the same orientation as the polarity of the second magnet, and wherein the cassette comprises radiographic media having at least one ferromagnetic end;

b) using a magnetic latch mounted within the scanning apparatus to hold the radiographic media at the ferromagnetic end, and to open the first and second doors, wherein the magnetic latch is mounted so that the polarity of the magnetic latch repels the polarity of the first and second magnets;

c) retracting the cassette while keeping the radiographic media engaged with the magnetic latch;

d) scanning the radiographic media with a scanning head to stimulate an area;

e) collecting light emitted from the radiographic media as a result of stimulation by the scanning head;

f) transferring the collected light to a light detector forming a signal;

g) transferring the signal to an analog to digital converter forming a digital signal;

- h) transferring the digital signal to a control processing unit;
- i) communicating the transferred digital signal with an output device;
- j) removing the scanned radiographic media by reinstalling the radiographic media into the cassette; and
- k) removing the cassette.

20. A method for scanning radiographic media wherein the media comprises at least one ferromagnetic end, the method comprising the steps of:

- a) inserting a cassette into a scanning apparatus, wherein the cassette further comprises first and second doors, and wherein the cassette comprises radiographic media having at least one ferromagnetic end;
- b) using a magnetic latch mounted within the scanning apparatus to hold the radiographic media at the ferromagnetic end;
- c) retracting the cassette while keeping the radiographic media engaged with the magnetic latch;
- d) scanning the radiographic media with a scanning head;
- e) collecting light emitted from the radiographic media as a result of stimulation by the scanning head;
- f) transferring the collected light to a light detector forming a signal;
- g) transferring the signal to an analog to digital converter forming a digital signal;
- h) transferring the digital signal to a control processing unit;
- i) communicating the transferred digital signal with an output device;
- j) removing the scanned radiographic media by reinstalling the radiographic media into the cassette; and
- k) removing the cassette.